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Draft
environmental
assessment (ea)
for the Thompson
Chain of Lakes
land exchange/
purchase between

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DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE
THOMPSON CHAIN OF LAKES
LAND EXCHANGE/PURCHASE
BETWEEN
PLUM CREEK TIMBER COMPANY, L. P.
AND
MONTANA FISH, WILDLIFE & PARKS

MARCH 1998

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EXECUTIVE SUMMARY

In 1992 the Montana Fish Wildlife & Parks (FWP) was fortunate to acquire fee title to 3,917 acres of highly unique Thompson Chain of Lakes properties from the Conservation Fund. This land was originally donated by Champion International in a bargain price sale to the Conservation Fund for the people of Montana. The Conservation Fund, in turn, donated the lands to the State, with fee title going to FWP to be managed as a Fishing Access Site. These lands include lake shore around McGregor, Little McGregor, Lower, Middle and Upper Thompson, Crystal, Horseshoe, Loon lakes, and other smaller lakes. The area became known as the Thompson Chain of Lakes (TCL). The more than 30 lakes and potholes which make up the TCL provide habitat for many species of fish and wildlife, and have high recreational and scenic values. Most accessible low elevation lakes in northwest Montana are surrounded by private land and cabin sites or home sites, with these features being the predominant landscape. Access for the public is normally limited to specific, intensely developed recreation sites. While there are cabins and homes in TCL, they are not the predominant feature, and recreational access has traditionally been, and continues to be more dispersed. Sites are undeveloped or primitively developed with a wide dispersal between campsites.

TCL is managed as a fishing access site for traditional dispersed recreation use and wildlife habitat with management and development consistent with FWP's fishing access program. The management goal is to protect the water, land, and air resources while providing public access for boating and fishing. Wildlife watching, camping, swimming, and other recreational pursuits are also features of TCL.

TCL's main attraction is the lakes with approximately 35 miles of shoreline. Approximately 19 miles of shoreline is owned by FWP. The U.S. Forest Service owns almost three miles of shoreline on McGregor Lake. Approximately eight miles of lake shore is privately owned with cabins, both seasonally or permanently occupied. The remaining five miles of lake shore is owned by Plum Creek Timber Company, L. P. (PCT).

If TCL is to retain its value for fish and wildlife, and its traditional dispersed recreational activities, the quality of the environment must be maintained and current recreation opportunities must be protected. It was recognized back in 1993 when the TCL Management Plan was prepared that it would be desirable for the FWP to acquire as much of the remaining shoreline as possible to protect water and wildlife habitat quality and provide for the continuing fish, wildlife, recreational and environmental values. Private ownership of what is currently PCT lake front lands would eventually result in maximum development, impacting the environmental goals established in the Management Plan. It would further concentrate public recreational use onto FWP land reducing the value of the recreational experience and the public's enjoyment of the area. A high density development on former PCT land is already planned for the area around Rainbow Lake. The developer has proposed as many as 80 lots on approximately 250 acres for future home sites.

Upon advice from the TCL Oversight Committee, FWP approached PCT in 1993 about a possible trade or acquisition of lake frontage owned by PCT in the TCL area. PCT stated that with the recent acquisition of the former Champion International land they were reviewing all their landholding and would contact us about this issue when that appraisal was done. When PCT agreed to exchange their lake frontage land for FWP's undeveloped upland forest land, FWP began the process of developing alternatives for trade and/or purchase of PCT lands. One alternative considered was the retention of subdivision rights on the land traded to PCT. That negotiation has been separated from the land trade due to timing, and consideration of the fact that protecting habitat and open space through a land management plan or the purchase of subdivision rights should include both land traded to PCT in this exchange, and lands currently owned by PCT which are adjacent to these properties. Additionally PCT has agreed to keep these lands in their timber base for at least five years to ensure time to pursue these options. Therefore, the following are the alternatives that FWP believes will meet the goals established in the TCL Management Plan of 1993:

Alternative A: No Action: Under this Alternative FWP would not exchange or purchase any of PCT's available lands. If FWP does not acquire these lands, PCT plans to sell these lands to private individuals for their own use or to developers. Based on their recent sale of two parcels in TCL it would be expected that PCT's lands would be subdivided.

Alternative B: Land Exchange with Purchase (Preferred Alternative): Under this Alternative FWP would exchange 1,590 acres of FWP uplands for 570 acres of PCT lakeshore lands as shown in Figure 1. The lands FWP would exchange are identified with horizontal hatching; the lands FWP would acquire are vertically hatched. In addition, FWP would pay PCT \$111,650 to balance the appraisal values of PCT's and FWP's lands. Funds would come from the Wildlife Mitigation Trust Fund.

Comments on this draft Environmental Assessment will be accepted through May 15, 1998. Comments should be addressed to TCL EA, Montana Fish, Wildlife and Parks, 490 N. Meridian Road, Kalispell, MT 59901. Questions should be directed to Gael Bissell, Alan Wood, or Marty Watkins at (406) 752-5501.

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THOMPSON CHAIN OF LAKES LAND EXCHANGE

I. INTRODUCTION

A. BACKGROUND

In 1990 Champion International approached Montana Fish, Wildlife & Parks (FWP) regarding a bargain sale/donation of their lands in the Thompson Chain of Lakes area. FWP needed time to investigate the acquisition and future management of this property. The Conservation Fund purchased the lands from Champion for \$1,000,000, and Champion donated \$3,000,000 in value. The Conservation Fund then held title to the lands until FWP could make a determination as to management of the lands and funding for said management. In 1993 FWP acquired fee title to 3,917 acres of former Champion Land from the Conservation Fund, including shoreline around McGregor, Little McGregor, Lower, Middle and Upper Thompson, Crystal, Horseshoe, Loon, and other smaller lakes and ponds. The area became known as the Thompson Chain of Lakes (TCL) Figs 1 and 1A.

TCL is managed as a Fishing Access Site for traditional dispersed recreational use, with management and development consistent with the FWP fishing access program. The management goal is protecting the water, land, air, and wildlife resources with a focus of providing public access for the purpose of boating and fishing (i.e., boat ramps, parking, road improvement, vault toilets, signing, and fencing). Camping and picnicking improvements, hiking and canoe trails, interpretive materials or signing and/or educational centers are generally not part of the normal fishing access site program. However, because of the historic use of camping and picnicking uses at TCL, these activities are allowed to continue. FWP management plan calls for maintaining and/or upgrading the facilities and natural resources needed to protect the environment and the health of the users. (Thompson Chain Of Lakes Management Plan & Environmental Assessment, November 1993.)

FWP ownership includes approximately 19 miles of shoreline. The U.S. Forest Service owns approximately three miles of shoreline on McGregor Lake. Approximately eight miles of lake shore is privately owned with cabins, both seasonally or permanently occupied. The remaining five miles of lake shore is owned by Plum Creek Timber Company, L. P. (PCT). PCT's current plans are to dispose of these high value lands.

To retain its attraction for dispersed recreation, the quality of the TCL environment must be maintained and enhanced. The 1993 TCL Management Plan proposed that FWP try to acquire as much of the remaining shoreline as possible to maintain the integrity of the lake habitat and provide for the continuing recreational opportunities (TCL Plan Highlights, p. 1, 4th paragraph). Additional private ownership of PCT lake front lands could result in increased development, impacting the environmental goals established in the TCL Management Plan, as well as reducing the wildlife habitat values and public recreational use and enjoyment of the area. A subdivision

with as many as 80 lots is presently being developed on Rainbow Lake and the upper lobe of Upper Thompson Lake, a tract of land recently sold by PCT to a developer.

FWP is proposing to exchange fee-title to 1,590 acres of its existing ownership at TCL, in combination with cash from the Libby and Hungry Horse Dam Wildlife Mitigation Program to acquire 570 acres of PCT lands along the TCL lake shores (Fig. 1). Acquired shoreline holdings include parcels along Upper and Lower Thompson, Loon, Horseshoe, Cibid, Cad, Topless, and Bootjack lakes. The funds from the Wildlife Mitigation Program will ensure that key riparian/wetlands along the lakes, particularly Section 32 along Upper Thompson Lake, will be conserved. Use of the Wildlife Mitigation Program funds will modify the management goals of these acquired parcels, particularly Section 32, to ensure that the wildlife habitat values of these parcels are maintained or enhanced. The lands which FWP would acquire are critical to maintaining the ecological integrity of TCL; they also provide important fish, wildlife, aesthetic, and public recreation values. Protecting these lands to retain these values is consistent with FWP's TCL Management Plan.

To acquire these 570 acres of lakeshore properties, FWP would trade to PCT its ownership of 1,590 acres of upland forest which FWP acquired from Champion in 1993. These uplands do not include any lake shore properties. Most of these parcels lie north of U.S. Highway 2; however, three parcels lie south of TCL (Figs. 1 and 1A). FWP's parcels now provide important scenic, wildlife, and recreational values.

FWP has developed two Alternatives for the proposed land exchange which includes a No Action Alternative and a Land Exchange Alternative. The Land Exchange Alternative proposes a land exchange (along with use of Wildlife Mitigation Funds). Plum Creek has agreed that in the near future they would consider alternatives on their current ownership and the lands traded to them to try to protect habitat and open space through a land management plan and/or the purchase of subdivision rights.

This document includes the detailed description of Alternatives considered, the preferred Alternative, and assessments of the environmental impacts associated with each Alternative. This document also contains a Socio-economic report and a summary of the 1993 TCL Management Plan.

B. PURPOSE AND NEED OF THE PROPOSED ACTION

In 1995, PCT purchased over 800,000 acres of timbered forest land in northwest Montana from Champion International Corporation. PCT conducted an inventory of these lands and determined that many parcels adjacent to lakes and some rivers and streams would be more suitable for other purposes than timber management. PCT has begun a program to dispose of these waterfront properties.

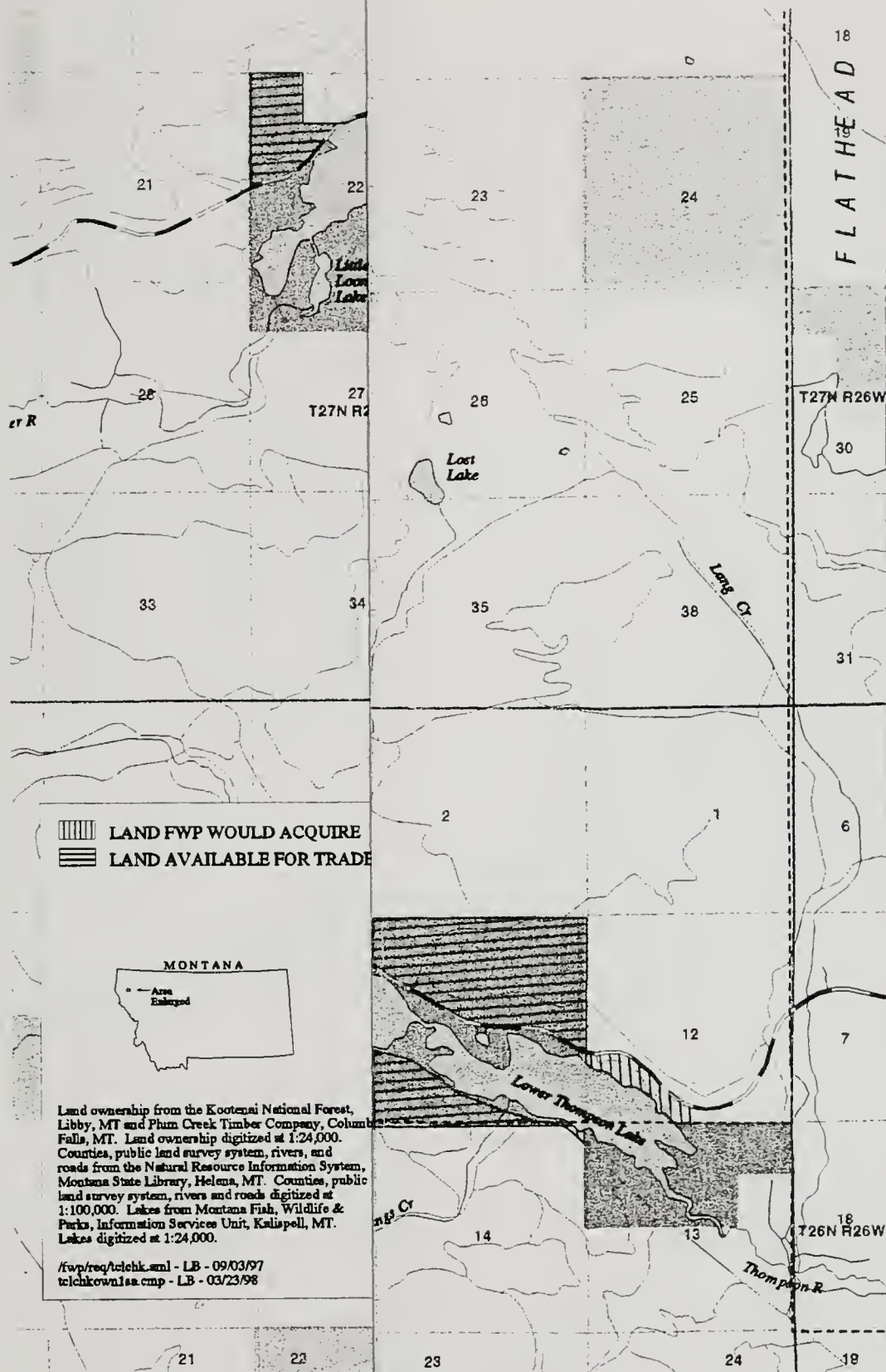


Figure 1

POTENTIAL LAND EXCHANGES THOMPSON CHAIN OF LAKES

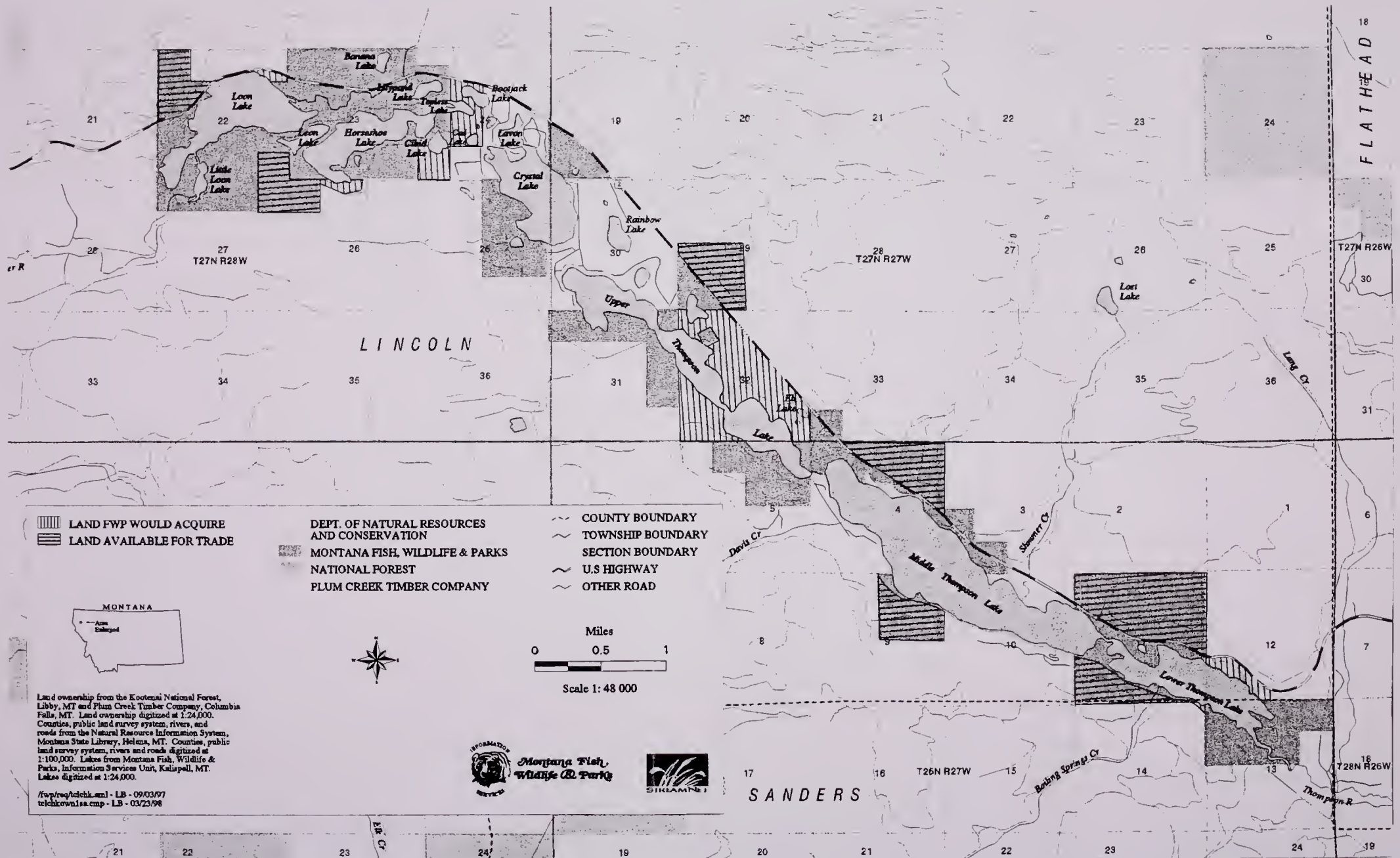


Figure 1

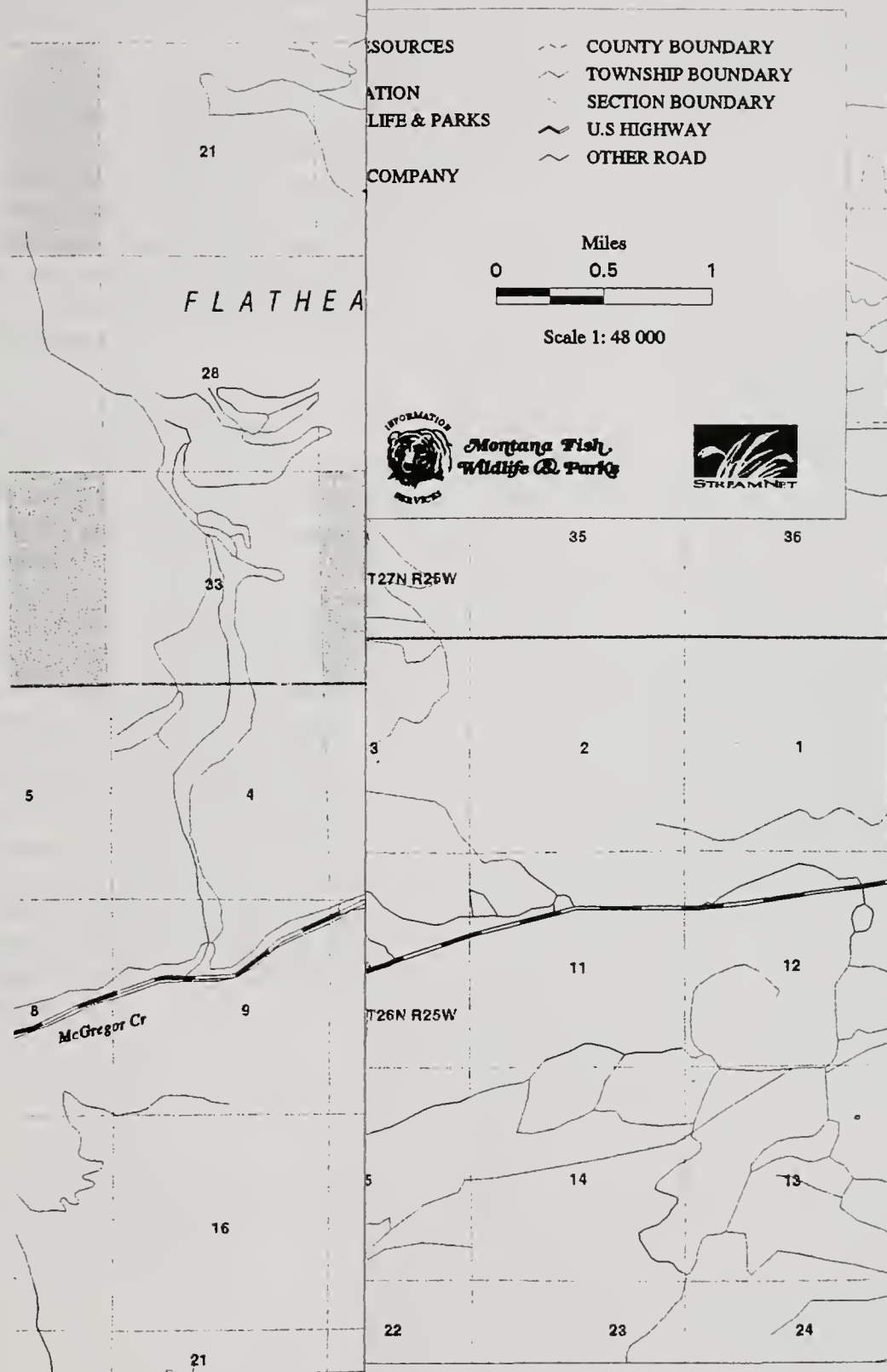


Figure 1A

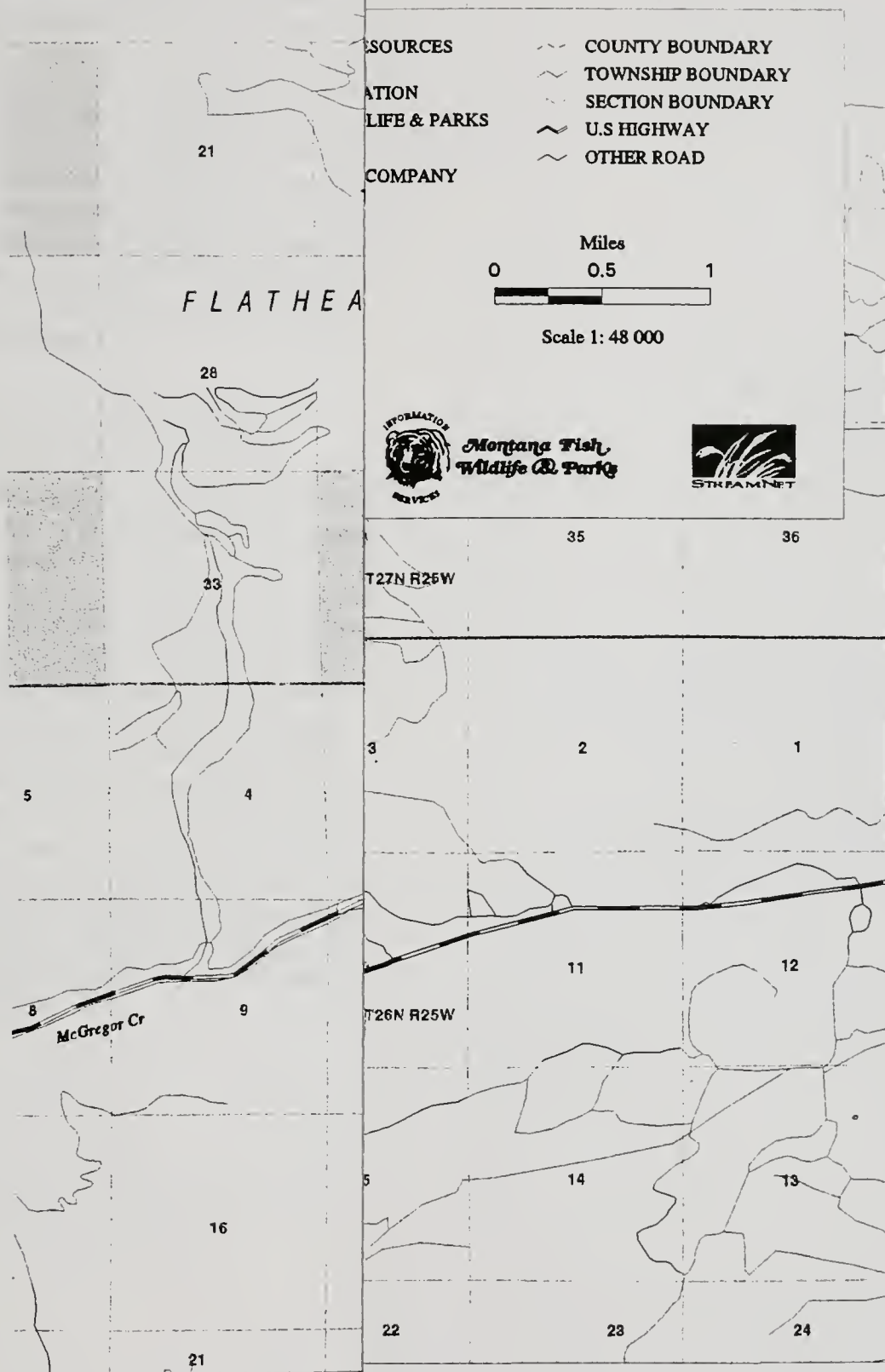


Figure 1A

POTENTIAL LAND EXCHANGES McGREGOR LAKE

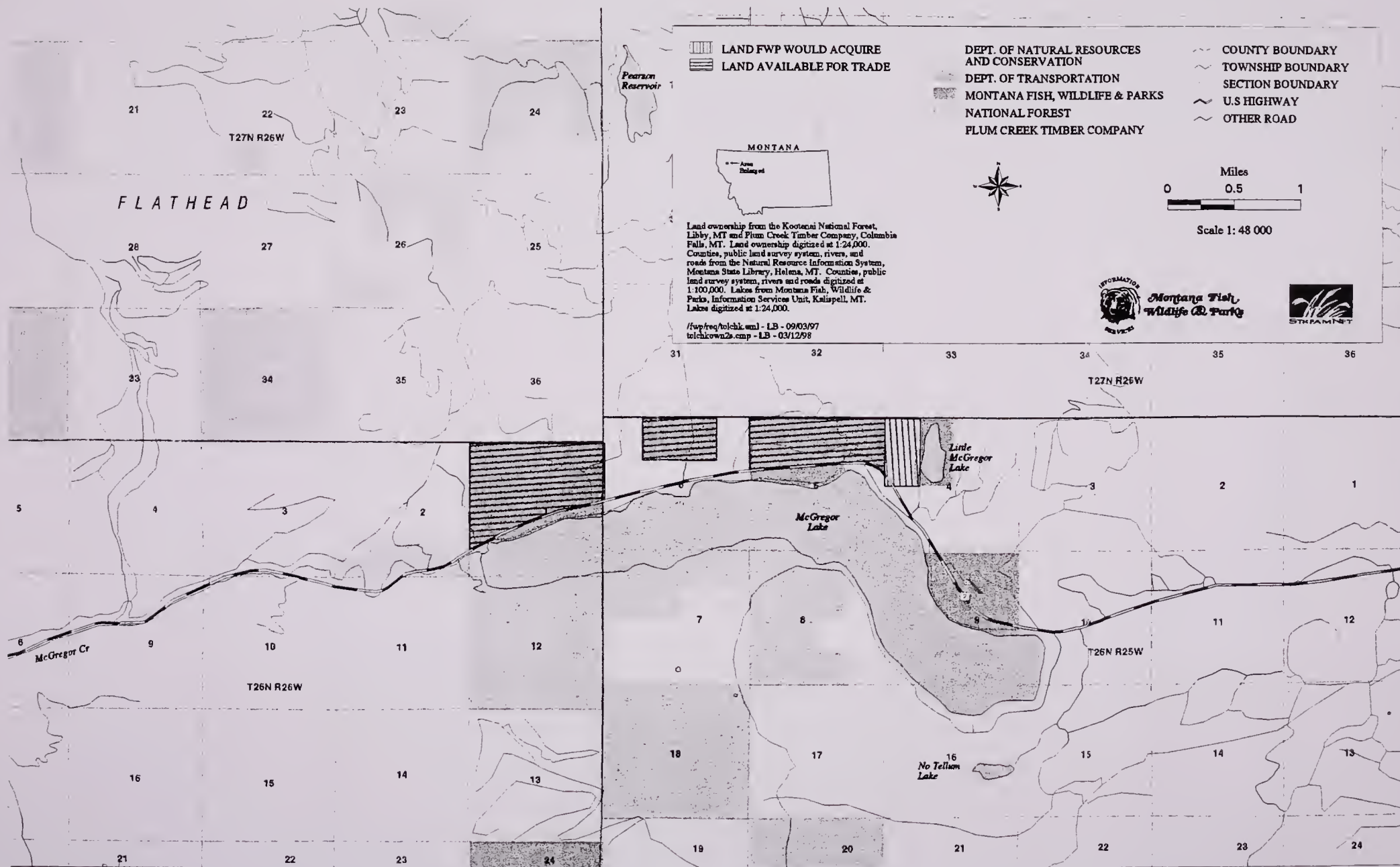


Figure 1A

The primary purpose of the proposed land exchange is to ensure conservation of TCL's unique lakeshore habitats and to maintain the open space, habitat, and public recreation values of these parcels. PCT presently manages these lands for timber and permits public access for hunting, fishing, boating, camping, and other recreation uses. Consolidating FWP ownership along TCL lakeshore properties would ensure continued protection of these important resources, protect key fish and wildlife habitats from development, and improve FWP's ability to manage the area.

If FWP fails to work out an agreement for PCT's lands along TCL, PCT will ultimately sell these lands to private individuals and/or developers. Development could irreversibly impact existing riparian/wetland and lakeshore habitats, decrease open space around the lakes, reduce aesthetic and scenic values, reduce current recreational opportunities, and concentrate use on existing FWP parcels. Other possible impacts include fragmentation of aquatic and terrestrial habitats, alteration and/or pollution of groundwater, degradation of surface water quality, changes in lake ecology or characteristics, and direct impacts to sensitive species such as the common loon. Increased human development also increases human and wildlife conflicts (e.g., game damage, predators).

C. AUTHORITIES AND DIRECTION

FWP is mandated by public law (87-1-201) to protect, enhance, and regulate the wise use of Montana's fish and wildlife resources for public benefit now and in the future. In addition, the Northwest Power Act of 1980 (PL. 96-501) authorized the creation of the Northwest Power Planning and Conservation Council (NPPC) and charged it with developing a program to "protect, mitigate and enhance fish and wildlife effected by the development, operation and management" of the federal hydropower system in the Columbia River Basin. Under the Northwest Power Act, the Bonneville Power Administration (BPA) and FWP established an agreement that provided funds from BPA for the protection, mitigation, and enhancement of wildlife and wildlife habitat affected by the development of Libby and Hungry Horse Dams. This Settlement Agreement was signed in 1988, payments to the Wildlife Mitigation Trust Fund were completed in 1994. The preliminary project proposal to acquire PCT land through a land exchange was reviewed and unanimously supported by the FWP Commission on February 7, 1997. The proposed project Alternative to use Wildlife Mitigation funds to help in the acquisition of lands was also reviewed and supported by the Wildlife Mitigation Advisory Committee (WMAC) members on September 12, 1996. WMAC is the group established by the Settlement Agreement to provide recommendations and guidance to FWP on implementation of mitigation activities.

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D. DESCRIPTION OF THE PROPOSED PROJECT AREA

1. General

The TCL project area consists of approximately 4,890 acres of land and water located along U.S. Highway 2 approximately halfway between Libby and Kalispell, Montana. It includes the corporate and FWP lands surrounding the Thompson Lakes, McGregor Lake, Little McGregor Lake, and other smaller lakes west of Crystal Lake (Figures 1 & 1A). The area can be reached approximately 45 minutes from Libby and one hour from Kalispell. Lakes vary in size from the largest, McGregor Lake at 1,328 acres, to the tiny Cibid and Cad lakes at approximately 8 acres. In addition the area contains numerous glacial potholes, wet meadows and small marshes. Most of the TCL land lies within the headwaters of the Thompson River drainage which flows into the Clark Fork River to the south. The Pleasant Valley Fisher River enters the project area at Loon Lake on the west end of the chain and flows into the Fisher and Kootenai Rivers.

There are approximately 200 cabin sites for year round and summer use located along the shores of McGregor, Middle Thompson, Upper Thompson, Crystal, Lavon, and Bootjack lakes. In addition, resorts are located on McGregor, Middle Thompson, and Crystal lakes. Total privately held lakeshore which accommodates these uses is approximately eight miles. An existing FWP State Park is located on Middle Thompson Lake, and a U.S. Forest Service Campground is located on the west end of McGregor Lake.

2. Water Resources

Water supply to the Thompson Chain of Lakes follows complex paths. Although the majority of recharge is by groundwater flow, several surface streams provide water to the system. Although no attempt has been made to measure and develop a hydrologic budget for Thompson Chain of Lakes, it seems that the discharge of the lakes is greater than inflow from surface flow. Much water of the lakes is recharged by groundwater flow through deep gravels and dipping bedrock as well as other geologic structures.

The Thompson Chain of Lakes are glacial kettles, developed in bedded and unbedded gravels of moraine and outwash during the last retreat of Pleistocene alpine glacier in Montana about 10,000 to 12,000 years ago. While many small lakes are shallow and fill seasonally, the larger lakes of the chain exceed 100 feet in depth. These deeper, larger lakes were formed by a combination of glacial scour and ice abandonment. They may derive substantial inflow through the glacial gravels and may also bottom in bedrock, tapping additional geologic structures for their water supply. Water from these lakes could percolate through gravels to fill small lakes like Rainbow, Bootjack, and to a lesser degree Horseshoe Lake. This water also may charge the gravel aquifers in the groundwater table which may be the source of most domestic well water in the area.

Lakes with little or no development have high water quality. Crystal Lake shows some impacts from septic drainage. Gravels and sands are poor filters of septic or other human related

pollutants which can enter the ground water and contaminate domestic well water supplies.

3. Vegetation

Upland Forest: Of the 4,890 acres of land and water within this project area, 56 percent consists of upland forest (2,735 acres). All of the upland areas have been logged within the last 25 years, some as recently as last year. Some of the lands FWP acquired in 1993 were logged by Champion a year or two prior to their donation to FWP. As a result, the uplands consist of a diversity of habitat types in various degrees of natural succession.

Habitat types vary from dry ponderosa pine/douglas fir on south and warm aspects to very mesic spruce/subalpine fir types on cool and north aspects. Stand ages range from early seral (seedling/sapling) to relatively mature. Dominant conifer species include ponderosa pine (*Pinus ponderosa*), Douglas fir *Pseudotsuga mensizii*, western larch (*Larix occidentalis*) and lodgepole pine (*Pinus contorta*) with a scattering of spruce (*Picea englemannii* x *Picea glauca*), black cottonwood (*Populus trichocarpa*), birch *Betula spp.*, and aspen (*Populus tremuloides*). Common understory shrub species throughout the project area include snowberry (*Symphoricarpos albus*), bear-berry (*Arctostaphylos urva-ursii*), woods rose (*Rosa woodsii*), serviceberry (*Amelanchier alnifolia*), willows (*Salix spp.*), mountain maple (*Acer glabrum*), chokecherry (*Prunus virginiana*), and grouse whortleberry (*Vaccinium scoparium*). Many common herbaceous species include pine grass (*Calamagrostis rubescens*), elk sedge (*Carex geyeri*), and introduced species such as Kentucky blue grass (*Poa spp.*) and knapweed (*Centaurea spp.*).

Aquatic/Riparian/Wetlands: The project area is characterized by a myriad of large and small glacial lakes and wetlands interspersed with upland forest (Figure 2). Approximately 44 percent of the project area (2,155 acres) consists of wetland or open water habitats as follows: open water (1,731 acres); lakeshore wetlands (253 acres); potholes and small lakes (87 acres); riparian habitats (79 acres) and wet meadows (6 acres). FWP lands border or include 33 lakes, potholes, and ponds. The remaining PCT lands include another 9 different lakes, potholes, and wetlands.

Most of the existing wetland habitats consist of lakeshore or lacustrine wetlands. These usually occupy shallow areas and the banks of lakes, ponds, potholes, and wetlands. The width or extent of riparian/wetlands depends on water depth, sediments, and slopes. Extensive riparian/wetlands occur along Upper Thompson Lake, along north shore of Middle Thompson Lake and along the Fisher River into Loon Lake. Common emergent species include bulrush (*Scirpus spp.*), cattail (*Typha latifolia*), and beaked sedge (*Carex rostrata*). Abundant shoreline species include red-osier dogwood, willow, alder, birch, and black cottonwood.

Just outside the project area, the Montana Power Company (MPC) purchased approximately 800 acres of emergent wetlands located east of McGregor Lake and known as McGregor Meadows as part of their wetland mitigation obligation for the relicensing of Kerr Dam. These lands are

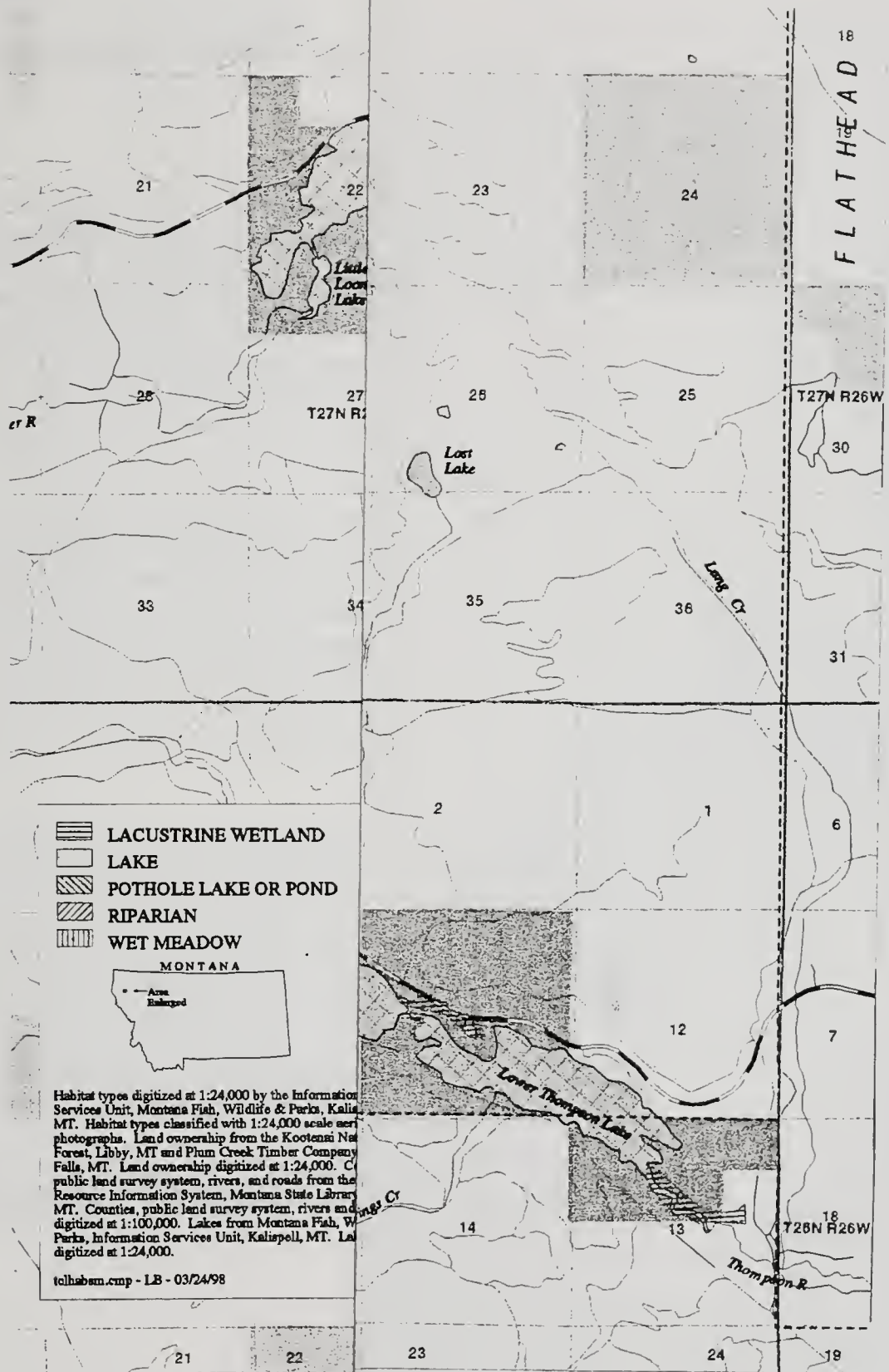


FIGURE 2

HABITATS THOMPSON CHAIN OF LAKES

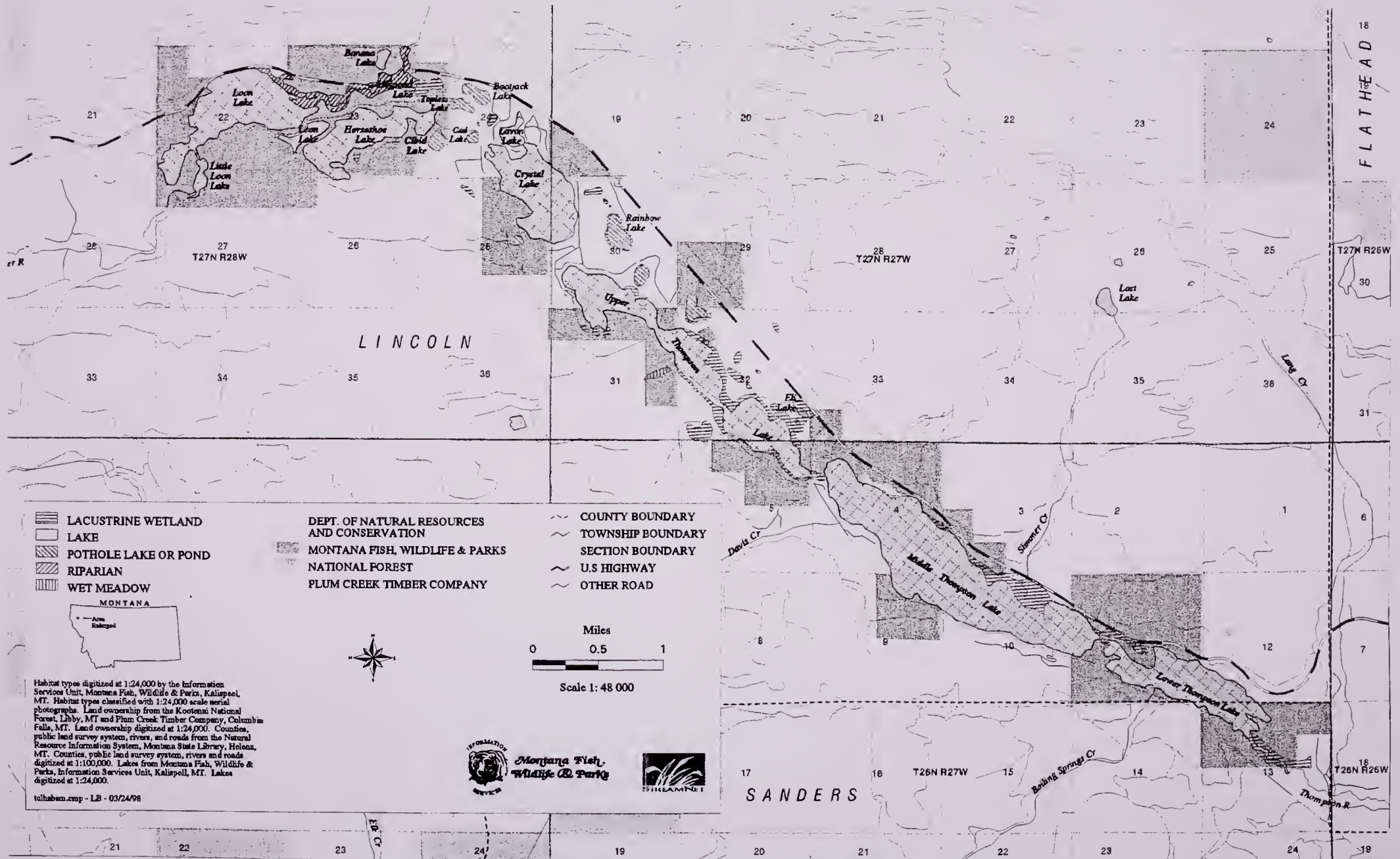


FIGURE 2

expected to be transferred to the U.S. Fish and Wildlife Service within the next year. The conservation and enhancement of these wetlands adds to the integrity of the TCL project area.

4. Agricultural:

None of the land is considered agricultural; however, there are several cattle grazing permits in the area.

5. Wildlife:

The PCT property provides year-round habitat for numerous wildlife species including white-tailed deer (*Odocoileus virginianus*), elk (*Elaphus canadensis*), moose (*Alces alces*), black bear (*Ursus americanus*), mountain lion (*Felis concolor*), bobcat (*Felis rufus*), coyote (*Canis latrans*) beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*) and a variety of mountain grouse. The lakes support a numerous and diverse species of migratory and breeding waterfowl including both dabbling and diving ducks. Special nongame wildlife values include habitat for a variety of shorebirds, neotropical migrants associated with conifer forest types, and cavity nesting species such as the pileated woodpeckers (*Dryocopus pileatus*) and saw whet owls (*Aegolius acadicus*).

Species of special interest or concern which are found in the TCL include the osprey (*Pandion haliaetus*) and common loon (*Gavia immer*). The common loon is probably the most sensitive species within the project area. Recently, common loon populations have suffered significant declines, particularly in the nearby states of Idaho, Washington, and Oregon. Washington is considering listing the species as state endangered species. Idaho has had no successful reproduction in the last few years. Montana presently supports approximately 200 loons each summer. However, Montana has only 60 nesting pairs, most (85 percent) of which are found in the northwest corner of the state. From these 60 pairs, Montana produces only 24-26 fledged young each year.

Data collected since 1981 indicate the TCL supported at least 5 nesting pairs of common loons in the past. Nesting lakes included McGregor, Lower Thompson, Upper Thompson, Horseshoe, and Loon lakes. Currently, only 2 nesting pairs of common loons can be found; both are located in Section 32 on the 2 lower lobes of Upper Thompson Lake. In the early 1990s the Montana Loon Society initiated a highly successful volunteer signing and education program which has helped protect nesting common loons from recreation related disturbances. In May at TCL and elsewhere, as nesting loons establish their nest sites, volunteers place floating signs 100 or more feet from the nest site indicating a voluntary closure area, as Common Loons are sensitive to humans coming within these distances. This program has been highly successful in reducing disturbances and maintaining a high degree of nesting success.

Threatened and endangered species which can be found at TCL include the bald eagle (*Haliaeetus leucocephalus*) and the gray wolf (*Canis lupus*). A bald eagle nest has been active

expected to be transferred to the U.S. Fish and Wildlife Service within the next year. The conservation and enhancement of these wetlands adds to the integrity of the TCL project area.

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Threatened and endangered species which can be found at TCL include the bald eagle (*Haliaeetus leucocephalus*) and the gray wolf (*Canis lupus*). A bald eagle nest has been active

on Horseshoe Lake for several years. Although no known wolf packs inhabit TCL, two packs are located nearby. The Dahl Lake Pack occupies the upper Pleasant Valley near Dahl Lake and Dredger Ridge, five miles north of McGregor Lake. The Thompson River pack tends to occupy the middle and lower Thompson River basin to the south. Because of the proximity of these existing wolf packs to TCL, dispersing wolves, and possibly the entire pack, have undoubtedly moved through the area from time to time.

6. Fisheries

In addition to wildlife values, the lake aquatic habitats provide excellent foraging cover and food for a large number of resident native and nonnative fisheries. Existing sport fish species include cold water species such as rainbow trout, lake trout, native west slope cutthroat trout, and kokanee salmon. Warm water species include small and large-mouthed bass, northern pike and perch. Many species such as perch and northern pike were illegally introduced into TCL; the first pike were found in Upper Thompson Lake in the 1980s.

FWP will manage TCL to maintain and promote self-sustaining populations of desired cold and/or warm water fish species where possible, provide for a diverse recreational fishery consistent with each individual lake's potential and historic use, provide for opportunities for recreational anglers to catch larger trout and bass consistent with the individual lake's potential, and recognize the importance of native fishes in the system.

7. Recreation/Aesthetics:

The lands and water in TCL area are traditionally used for camping, picnicking, general enjoyment, sightseeing, berry picking, fishing, big and small game hunting, upland bird and waterfowl hunting, and bird-watching. Plum Creek lands in the area are not and have never been posted to keep the public from using the land. Some Forest Service and PCT roads around the TCL area have been gated at times to reduce impacts to roads, stream habitats, shorelines, and to increase security for big game.

The TCL area is a highly aesthetic unique area with over 40 ponds, lakes, potholes, or wetlands surrounded by forested uplands within a 40 mile corridor. Most of the lakes and ponds are not currently developed. The largest impact to aesthetics or scenic values is U.S. Highway 2, particularly after its re-alignment and expansion.

Primary view sites are from the views along Highway 2, from Logan State Park, and from boats in the water. The view sheds provide a natural setting, with some rural setting seen on Middle Thompson and the upper lobe of Upper Thompson due to cabin site development. The overall Recreational Opportunity Class for this area is roaded natural.

By implementing the concepts of Limits of Acceptable Change, current management has tried to limit site capacities at recreation sites, imposed stay limits, and provided limited facilities.

8. Commercial:

A year-round resort with restaurant, limited groceries, bar, and cabins is located on McGregor Lake. Another commercial facility with restaurant, limited groceries, bar and cabins is located on Crystal Lake. Both of these facilities also have gas pumps. The Crystal Lake establishment has a beach and picnic site which it rents out to recreation groups. Another restaurant and bar is located across the highway from the resort on Crystal Lake. A small grocery store, the Midway Market, reopened in 1997. There are cabins for rent next to the FWP campground on Middle Thompson Lake.

E. MANAGEMENT GOALS AND OBJECTIVES

The Management goals and objectives outlined in the TCL Management Plan are to manage the TCL area as a traditional dispersed recreation use, with management and development consistent with FWP fishing access program. The existing plans call for protecting the wildlife and recreation resources, and providing public access for the purpose of boating and fishing (i.e., boat ramps, parking, and road improvements, vault toilets, signing, and fencing). Camping and picnicking improvements, hiking and canoe trails, interpretive materials or signing and/or educational centers are usually not part of this program. However, because these uses have always been a part of the recreation needs and opportunities established in the TCL area, they will be allowed to continue, and improvements to these facilities are not precluded.

With the proposed use of Wildlife Mitigation Funds as part of the proposed land exchange and purchase Alternatives, FWP will amend the existing Management Plan to reflect wildlife values, particularly along Upper Thompson Lake. These modifications are described under the Alternatives.

II. ACQUISITION ALTERNATIVES

A. ALTERNATIVES CONSIDERED AND DISMISSED

1. **Direct Purchase of PCT Lands:** The cost (approximately \$2,000,000) for PCT's 570 acres of land along TCL would far exceed FWP's financial resources either under the Fishing Access or the Wildlife Mitigation Programs. FWP has very limited Fishing Access Site purchasing funds. Land and Water Conservation Funds (LWCF) are very difficult to obtain, particularly within the one year time frame required by this project.
2. **Direct Purchase of PCT lands, Place a Conservation Easement on PCT lands, then Resell:** FWP would need to initially expend \$2,000,000 to secure the PCT lands and then reduce the value of the lands to almost no value with the conservation easement restrictions. To be consistent with FWP's management plan for TCL, FWP's conservation easement terms would probably require selling of entire or large parcels, minimal development, and unrestricted public access. This Alternative would be similar in cost to the direct purchase alternative described above.
3. **Purchase a Conservation Easement:** PCT has not expressed any interest in selling a conservation easement on the 570 acres. PCT would like to obtain additional forest lands as part of the TCL agreement.
4. **Lease:** PCT has not expressed an interest in leasing the land for certain land uses. Additionally, leasing is expensive and short-term requiring renegotiation of the lease in the future. Due to its short-term nature, leasing is usually not an efficient or cost-effective means to implement a Fishing Access program or achieve significant wildlife mitigation. In the case of this proposed project, FWP would primarily be leasing development rights which are best purchased through a conservation easement.

B. DESCRIPTION OF REASONABLE ALTERNATIVES:

1. **Alternative A, No Action :**

Under this Alternative FWP would not exchange or purchase any of PCT's available lands. If FWP does not acquire these lands, PCT will sell these lands to private individuals for residences, or to developers. Based on PCT's recent sale of two parcels in the TCL (both were purchased and subdivided into small lots by developers or Realtors), it would be expected that PCT's lands would be subdivided. The parcel located on Rainbow lake between Upper Thompson and Crystal lakes is currently being reviewed for as many as 80 lots.

2. Alternative B, Land Exchange with Purchase (Preferred Alternative):

Under this Alternative FWP would exchange 1,590 acres of FWP uplands for 570 acres of PCT lakeshore lands as shown in Fig. 1 and 1a. The lands FWP would exchange are identified by horizontal hatching; the lands FWP would acquire are vertically hatched. In addition, FWP would pay PCT \$111,650 to balance the appraised values of PCT's and FWP's lands. Funds would come from the Wildlife Mitigation Program.

Under this Alternative, FWP would acquire 98 acres of riparian/wetland habitat and 472 acres of upland forest habitat from PCT. However, under the crediting strategies of the Wildlife Mitigation Program, FWP would have to account for the net loss of FWP's ownership of 1,118 acres of upland forest habitat due to the exchange: (1,590 acres of FWP uplands - 472 acres acquired from PCT = 1,118 acres). PCT has stated that their current plan is to place the acquired lands into their timber base for at least the next five years. The land would be managed under their Environmental Principles, attached in Appendix E. PCT would also manage these lands under the agreements made in the Checkerboard Land Exchange, which allows continued public access to these lands. As long as PCT continues to manage these lands as timber lands within the constraints of environmental principals and stewardship, the net habitat loss of FWP's ownership of 1,088 acres may be negligible. However, with no development restrictions attached to FWP's lands, PCT or succeeding owners may decide to eventually sell these lands for development. Assuming that the lands with high value views of TCL would someday be converted to rural/ residential or cabin uses, there could be a net loss of upland forest to the Wildlife Mitigation Program. Estimating development impacts at $\frac{1}{3}$ to $\frac{1}{2}$ of the existing habitat values, the Wildlife Mitigation Program could lose 372-559 acres of upland forest credit over time.

One alternative considered was the retention of subdivision rights on the land traded to PCT. That negotiation has been separated from the land trade due to timing, and consideration of the fact that protecting habitat and open space through a land management plan or the purchase of subdivision rights should include both land traded to PCT in this exchange, and lands currently owned by PCT adjacent to these properties. Additionally PCT has committed to keep these lands in their timber base for at least five years to ensure time to pursue these options.

III. ENVIRONMENTAL REVIEW

A. EVALUATION OF ALTERNATIVES ON THE PHYSICAL ENVIRONMENT

1. Land Resources:

Alternative A, No Action: This Alternative would probably result in significant changes in land use and land resources on PCT's 570 acres of land surrounding the lakeshore. This land would most likely be converted to home and cabin lots with new roads and other facilities (i.e., power lines, fences, outbuildings, etc.). Land resources would be disturbed and altered for construction of buildings, roads, driveways, lawns, and septic tanks. Gravels may be extracted locally to maintain roads and driveways. Soil erosion and compaction is likely to occur in developed areas. Lake shorelines would be disturbed for construction of docks or boat houses. Disturbances to land resources could ultimately impact water quality.

Alternative B, Land Exchange With Purchase: The lands which FWP would acquire along the lakeshore would not be developed for commercial or residential purposes. Existing land disturbances such as campsites, access roads, and boat ramps will probably be maintained or minimally improved by FWP to minimize impacts to land or water resources. Some soil compaction and erosion will occur as a result of continued public use. Under this Alternative, FWP would not encourage an increase recreational use of lands, particularly within Section 32, over present levels other than to provide sanitary and safe camping conditions. In time, some of the upland areas, particularly those above U.S. Highway 2 and the ACM road, and/or other parcels with views, could be developed for rural residential, commercial, or subdivision purposes. If this occurred, the impacts to land resources could be significant and would include compaction, leveling, and erosion due to construction of structures, roads, power lines, lawns, septic systems, etc. Future development may increase demand on local sand and gravel resources within the project area.

2. Air Resources/Aesthetics/Visuals:

Alternative A, No Action: Commercial or residential developments are likely to occur on the 570 acres of PCT lands along TCL. Extensive development would tend to reduce air quality, aesthetic, and visual character of these sensitive and unique properties. Undeveloped shorelines are relatively rare in northwest Montana and will continue to decrease with time. Given this unique and highly scenic value associated with TCL, the negative impacts to these values with this Alternative are significant. Development would change the current aesthetic experience from Natural to Rural in the Recreation Opportunity Spectrum, thus changing the experience of campers and abrogating the current management plan.

Alternative B, Land Exchange With Purchase: Impacts to the existing scenic, aesthetic, and air quality resources along the TCL lakeshore lands which would be acquired by FWP would be minimal. If these lands remain in PCT's timber base, future impacts to air quality, aesthetic and scenic resources would probably be minimal.

3. **Water Resources:**

Alternative A, No Action: Groundwater movement throughout the unsorted glacial till that occupies much of TCL is difficult to predict and may be locally complex. A number of the lakes have no apparent surface discharge, but receive and exchange water entirely through the gravels in the TCL basin; hence increased use of septic systems will impact all the lakes in this chain and the effluent from septic systems travels through the groundwater. Wells are also tapping this groundwater for the home water supplies. Under the No Action Alternative, the water resources of TCL's unique and highly vulnerable lake/groundwater system could have a negative change in response to development. New residences and cabins with the resulting sewage effluent going into the groundwater could have a major adverse affect on the lake water quality (TCL Management Plan, Geology, p. 39) as well as groundwater used for wells. Additional structures along the lakeshore could increase erosion and runoff thereby increasing turbidity, and loading of nitrate and other nutrients. The negative impacts of this Alternative on water resources could be significant.

Alternative B, Land Exchange With Purchase: The water resources of the lakes with FWP shoreline ownership would probably retain their present higher quality water. (The exception may be Rainbow and the upper lobe of Upper Thompson Lake where a developer is proposing as many as 80 new lots. This potential negative impact to water quality from this subdivision would be the same under all the Alternatives). The TCL management plan calls for maintaining dispersed recreational uses which should not result in significant adverse affects to surface or groundwater resources as long as human trash and wastes are managed and vegetation along the shorelines is maintained. On the property they currently manage, FWP has established maximum number of campers per site, improved boat launches to reduce erosion, and replaced many inadequate toilet facilities with vault toilets to reduce recreation related impacts to water quality. It would be their intention to survey the lands acquired and set capacity limits and provide vault toilets at these locations also. Some seasonal restrictions on use of particular campsites (for example Horseshoe Lake) may be necessary for the protection of Bald Eagles. It is not anticipated that any of the acquired sites would need boat ramp facilities.

Potential future development of 1,590 acres acquired by PCT would have some impact on water quality, but would be reduced by the farther distance effluents would have to travel to reach the lakes and the glacial tills. This Alternative will have lesser impact on water quality unless development is extensive or directly impacts one of the few drainages (e.g. Tallulah Creek) entering the TCL basin.

4. **Vegetation Resources:**

Alternative A, No Action: With the No Action Alternative, FWP would expect the remaining 570 acres and five miles of shoreline to be significantly impacted by future subdivisions. Construction/reconstruction of roads, home and cabin sites, and other facilities will cause direct removal of native vegetation. In addition, landowners would tend to clear significant amount of native shoreline vegetation for views, docks, lawns, and other reasons.

Alternative B, Land Exchange With Purchase: The proposed action should provide long-term maintenance and enhancement of riparian/wetland as well as upland plant communities present in the 570 acre acquisition. Lands acquired by FWP would be managed to retain or improve current vegetative cover and diversity. FWP would manage to develop mature, diverse forest stands with a diversity of age and species composition. On the 1,590 upland forest acres acquired by PCT, these lands would be placed in their timber base. Commercial timber would likely be harvested immediately upon acquisition according to their existing environmental standards and management plans.

In the future, should some of these lands be developed and subdivided, native early successional vegetation would be managed to meet residential or commercial objectives causing more long term interruption of the natural ecological processes.

5. **Fish/Wildlife Resources:**

Alternative A, No Action: This Alternative offers no guarantee as to the continued maintenance or enhancement of natural fish and wildlife habitats. Future development would lead to significant adverse affect on these resources. Changes in current recreational and timber management land uses to cabin and home sites would fragment and reduce the existing important wildlife habitat values. Increased human presence on existing big game winter range would probably lead to complaints of game damage and concerns with mountain lions or bears. Big game populations would likely be adversely affected by supplemental feeding and free ranging dogs. Loss of shoreline cover would reduce nesting success of waterfowl and shorebirds. Of significance would be the impact of increased human use and changes in habitat on the nesting and rearing success of the two existing common loons pairs, a Montana species of special concern.

Fisheries would be impacted by the additional subdivision that is expected due to increased fishing pressure, and the change in water quality due to increased septic discharge. Additionally, fish rearing areas would be impacted by vegetation clearing along shorelines.

Alternative B, Land Exchange With Purchase: The Proposed Action would help maintain and enhance important habitats for big game, upland game birds, non game wildlife, and aquatic birds and mammals on the lands acquired by FWP. The Proposed Action would continue to maintain seasonal and year-round habitat for all game species as well as cavity nesting birds such as pileated woodpeckers, raptors such as red-tailed or sharp-shinned hawks, ospreys, and neotropical migrants. Wildlife use and species diversity could be expected to increase on FWP lands as the forest matures.

If the 1,590 acres of land offered to PCT stays in the timber base upland wildlife habitats would probably remain a early successional forest types and provide quality foraging, resting and in some areas, winter range habitat for big game. Open timbered and early successional forests provide valuable habitat for small game and many non-game birds and mammals. If PCT sells lands to developers, loss of big and small game, and nongame birds and mammals will occur due to the anticipated conversion of land use.

Fisheries impacts will be more limited in this alternative as housing immediately adjacent to the shoreline would be eliminated, and hence effluent and vegetation removal would not be increased. Fishing pressure is expected to increase regardless of this trade as the human population grows. However, fishing pressure would increase even more if view lots are sold and subdivided, and the people in those lots use the lakes for fishing and recreation.

6. Unique, Endangered, Fragile, or Limited Environmental Resources:

Alternative A, No Action: Under the No Action Alternative, the opportunity to protect these habitats would be lost. Lands may be developed like Rainbow Lake, impacting the fragile wetlands and lowlands, which will have a major affect on the wildlife, including the common loons who depend on these habitats. Development, particularly on Section 32, would significantly impact loon nesting and survival due to habitat loss and disturbances and possibly to changes in water quality. Loss of the last two nesting pairs of common loons in this area would probably extirpate loons from the TCL area and be a major set back for efforts to maintain and increase common loons in the Pacific northwest.

Alternative B, Exchange With Purchase: The proposed action would help maintain and enhance the sensitive habitats and fragile ecosystem of TCL. In particular, management of lands in Section 32 along Upper Thompson Lake would maintain the status quo to insure continued nesting of two pairs of common loons. The upland forest communities on FWP's exchanged lands contain some old growth trees (e.g. western larch or ponderosa pine greater than 200 years). Under this Alternative, these trees would be harvested. In the long run, if these lands were subdivided into rural residential (20 or 40 acre lots), a patchwork of forest in varying ages of succession related to

different management scenarios may occur. Management might focus on a diversity of open spaced trees to reduce fuels and increase land and scenic values.

B. EVALUATION OF THE PROPOSED ACTION AND REASONABLE ALTERNATIVES ON THE HUMAN ENVIRONMENT

1. Noise/Electrical Effects/Transportation

Alternative A, No Action: Should No Action be taken and PCT's lake shore properties become developed, increased short and long-term noise impacts would occur due to construction of homes, roads, power lines, etc. Noise associated with developments including domestic pets, homesite and recreational uses, ORVs, and boats could be expected. Under this Alternative, additional utilities and improved transportation systems would be needed to service homes or developments. With more development, noise levels would occur for a longer period of time through the different seasons.

Alternative B, Exchange With Purchase: Noise effects under Alternative B on those lands surrounding the lakes would be similar to existing noise levels. However, if PCT decides to sell their acquired lands adjacent to U.S. Highway 2 or the ACM road for development purposes, noise, electrical, and transportation effects in these the area could increase as described in Alternative A above. Noise and transportation effects associated with forest management/enhancement activities would be expected to continue as in the past with Champion's prior ownership.

2. Public or Government Services/Schools/Utilities

Alternative A, No Action: Current residents receive government services for county road maintenance, mail delivery, county police protection, school transportation, and voluntary fire protection. No local public school nor local county office exists in the TCL area. Under this Alternative, it is likely that additional seasonal or year-round residents would be added to the existing human population due to increased development along the lake shore lands. Demands on government services for fire, police, schools, roads, and other services would tend to increase with population. Demands on FWP to provides services, resolve conflicts with landowners and public users, address game damage, or other wildlife/human conflicts would also be expected to increase.

The TCL Management Plan encourages FWP to acquire remaining shoreline parcels to insure habitat integrity, water quality, recreational opportunity, and scenic values. The No Action Alternative would conflict with this objective.

Alternative B, Land Exchange With Purchase: Alternative B would help maintain the status quo of a rural community and would most likely result in fewer demands on public

local schools and additional government services (outside of FWP) in comparison to Alternative A. However, if PCT sells some of their acquired lands for development or commercial uses, some of the impacts described under Alternative A may occur.

3. Existing and Future Land Uses/ Industrial & Agricultural Production/ Housing

Alternative A, No Action: Under this Alternative, changes in land use can be expected to occur and would include subdivisions and/or commercial developments along lake shores. Currently there are approximately 200 dwellings, both on and away from the lakeshore in the TCL area. The proposed 80 lot subdivision, a 40 percent potential increase over the present population, is presently under development in the area. Additional housing could create a country townsite with all its additional demands and needs. FWP's limited Fishing Access Site funds would be commonly directed towards problem solving with pets, litter, vandalism, trespass, wildlife, and many other issues not related to providing public recreational opportunities.

Alternative B, Exchange With Purchase: Existing land uses would continue and include forestry, dispersed recreation, fishing, camping, picnicking, and hunting for at least five years. These activities could decrease if PCT sold some of their acquired uplands for residential or commercial purposes. If residential or commercial developments took place on lands acquired by PCT, some of the land use impacts described under Alternative A would occur. The present cattle grazing permits could continue according to agreed upon grazing management plans between FWP and permittee.

4. Risk/Health Hazards

Alternative A, No Action: Under this Alternative, we could expect additional subdivisions and the associated increase in people residing along the lake shores. Accidents and crime would probably increase in proportion to population increases. Risks of wildfire would probably increase unless the community addressed fuels and burning issues. There could be an increased risk of contamination of well water from increasing numbers of septic systems associated with new homesites. It is not known whether other risks to human health and safety would increase or remain the same with an increase in human residences.

Alternative B, Exchange With Purchase: Under this Alternative, the risks to health and safety are expected to be about the same as those which currently exist as more favorable water front lands would not be available for home construction. Some development might occur on the lands PCT acquires back from the lake front if the land is removed from the timber base in five years. The increase in risks to human health and safety would again be expected to increase in proportion to the increase in human population associated with lands PCT acquires from FWP.

5. Recreation/Local Economy

A more detailed analysis of the socio-economic impacts of this action is held in Appendix D.

Alternative A, No Action: Under the No Action Alternative, a major portion of the lake shore lands would probably be converted to residential homes and/or commercial uses. While this provides some recreational opportunities for the incoming residents, it will virtually eliminate all public recreation use on these lands. Additionally, subdivision could alter fish and wildlife habitats. Under this Alternative, the aesthetics associated with fishing or wildlife viewing in an undeveloped setting would be greatly reduced. Use of local restaurants, groceries, bars, and gas services would probably increase and benefit these businesses as traffic increased. Conflicts would be expected between private lot owners and the public used to using this land to recreate. Traffic would increase, bringing an increase in noxious weeds.

Alternative B, Exchange With Purchase: This Alternative would help maintain the fish and wildlife habitats which in turn may help maintain core fish and wildlife populations for public use and enjoyment. Fishing and camping are the most important recreational activities on existing FWP lands, currently over 24,578 angler days are spent at TCL. Approximately 30 percent of these users stay overnight. Hunting for small or big game also provides a valuable local economic resource during the fall hunting season, as does wildlife viewing and other forms of dispersed recreation. The lands PCT owns are currently in their timber base, but have been identified as having a higher value as recreational property than as timber. Currently fishing and camping are major activities on these lands. PCT has committed to retaining the lands acquired in their timber base for at least five years. If FWP lands acquired by PCT were sold after that time for commercial or residential development, fishing access and hunting opportunities could be lost from many upland acres.

Wildlife viewing is also important to the local lifestyle and the recreation economy of this area. Under this Alternative, people traveling along U.S. Highway 2 may still be able to continue to observe wildlife including white-tailed deer, and an occasional elk or moose. Commercial or residential development would reduce this form of recreation activity.

6. Aesthetics/Open Space:

Alternative A, No Action: Under this Alternative, the aesthetics and open space values of the TCL area would probably reflect human developments rather than open forest lands. There would be a significant loss of undeveloped lake shore, a rarity in northwest Montana. Subdivisions would result in loss of open space and the natural appearance of the area.

Alternative B, Land Exchange With Purchase: The proposed acquisition in this Alternative would help maintain the scenic values associated with the prominent geographic lake features of the TCL area. If PCT sold this land out of its timber base in five years it could result in the loss of aesthetics along U.S. Highway 2 and in the upland forest.

7. Taxes, Financial, Employment Opportunities, Private Business

Alternative A, No Action: Under this Alternative, the most likely scenario is added development which may subsequently change the tax base and tax revenues. There would be increased tax revenue from developed lake front property. Additional development usually increases demand on local services including road maintenance, police protection, schools, fire, etc. Subdivision development may not fully pay for the added community costs of development in rural areas (per Tom Jentz, Flathead County Regional Development Office), but commercial and business developments may help offset some of these deficits. The result may be an increase in local property taxes to landowners.

Alternative B, Land Exchange With Purchase: This Alternative would maintain the current level of county tax proceeds as FWP makes payments in lieu of taxes on lands it owns. No other employment or other monetary benefits or business opportunities are expected under Alternative B, unless the property PCT acquires is developed at some point in the future. If this happens, impacts will be similar to A above.

8. Cultural/Historic Resources

Alternative A, No Action: Under this Alternative, no impacts to cultural/historical resources are expected to occur. An Environmental Assessment (EA) conducted at the time of the TCL acquisition indicated that no significant Cultural/Historical Resources were present in the land proposed for exchange to PCT.

Alternative B, Exchange With Purchase: As under Alternative A, no expected impact is likely to occur. An EA conducted at the time of the TCL acquisition indicated no significant Cultural/Historical Resources present on the land proposed for exchange to PCT. A cultural survey will be conducted before any ground disturbance occurs on lands FWP acquires. This draft EA is being reviewed by the State Historic Preservation Office and the Confederated Salish and Kootenai Cultural Committees to determine if any cultural or historic values exist within the proposed project area.

9. Cumulative Effects

Alternative A, No Action: If FWP does not complete an exchange with PCT on the TCL area, the cumulative biological and socioeconomic benefits of FWP managing habitats and public recreation opportunities will not be realized and the negative environmental impacts may occur as described under the No Action Alternative. Should such a large and conspicuous piece of land be further divided into small parcels, the TCL area would change from rural/timber to rural/residential/commercial.

Alternative B, Exchange and Purchase: This alternative does not present the environmental and economic concerns presented in Alternative A. PCT has agreed to keep the land it acquires in its timber base for at least five years, and negotiate with FWP to protect habitat and open space through either a land use management plan or through the selling of its subdivision rights. If in the future this land is sold out of the timber base it could lead to impacts to aesthetics and scenic viewing if unplanned commercial or residential development occurs. Increases in development, if they occur, could lead to impacts to upland wildlife habitats, water quality, and recreational opportunities. Increased development near the lakes, if they occur, could also increase demands on existing FWP resources to manage TCL.

IV. CONCLUSION

1. Based on the significance criteria evaluated in this EA, is an EIS required?

The environmental impacts of the preferred Alternative are primarily positive or neutral; the proposed project will help maintain the current land uses and existing economies as well as maintain and enhance fish and wildlife habitats. The project is consistent with the goals, objectives, and strategies of the TCL Management Plan and the Wildlife Mitigation Program, an obligation FWP has to mitigate the effects of Libby Dam on wildlife habitat. Some of these same environmental effects have already been disclosed in the Riparian/Wetland Conservation Program, an element of the Wildlife Mitigation Program (FWP 1995). Based on this analysis, an EIS is not required.

2. Describe the level of public involvement for this project, if any, and given the complexity and the seriousness of the environmental issues associated with the Proposed Action, is the level of public involvement appropriate under the circumstances?

Completed copies of the Draft EA with all attachments are automatically sent to the following entities: Wildlife Mitigation Advisory Council members, County Commissioners, Planning Office, Montana Department of Environmental Quality and Natural Resources, the Kootenai National Forest, adjoining landowners, state and local libraries, regional conservation organizations, and citizens who have requested prior Draft EAs on these projects.

In addition, a notice of the availability of the Draft EA asking recipients if they would like a copy of draft EA and/or Decision Notice is sent to approximately 300 other individuals, organizations, or public offices located primarily within northwest Montana or in Helena. A news release and legal notice of EA availability and the timing of formal public comment period and public hearing date are sent to all regional daily and weekly newspapers prior to the public comment period and public hearing.

3. Duration of comment period for the EA:

FWP will accept public comments on this proposal that are postmarked no later than 30 days after issuance of this Draft EA, or May 15, 1998.

4. Other jurisdictional agencies/organizations:

The Draft EA and all attached documentation are sent to both the Lincoln and Flathead County Planning Offices and all the Lincoln and Flathead County Commissioners. Copies also are sent to Montana Department of Environmental Quality, Department of Natural Resources and Conservation, Environmental Quality Council, Governors Office, Confederated Salish and Kootenai Tribal offices, and all members of the Wildlife Mitigation Advisory Council (WMAC). This latter organization consists of major land management agencies and public utilities that

provide recommendations and guidance to FWP on implementation of the Wildlife Mitigation Program.

5. Individuals/groups contributing to the EA:

Gael Bissell, Wildlife Biologist, FWP
Alan Wood, Wildlife Mitigation Coordinator, FWP
Marty Watkins, Recreation Manager, FWP

6. Name, title, address and phone number of the persons(s) responsible for preparing the EA:

Wayne B. Worthington, Consultant, Landscape Architect, 365 Summit Ridge Drive, Kalispell, MT 59901; (406) 752-2916.

Marty Watkins, Parks Operations Supervisor, Fish, Wildlife and Parks, 490 N. Meridian Road, Kalispell, MT 59901; (406) 751-4575

Gael Bissell, Wildlife Biologist, Fish, Wildlife and Parks, 490 N. Meridian Road, Kalispell, MT 59901; (406) 752-5501

REFERENCES CITED

Thompson Chain of Lakes Management Plan and Environmental Assessment, November 1993, Montana Department of Fish, Wildlife and Parks, Kalispell, MT. 77 pps with appendices.

Montana Fish, Wildlife & Parks 1997. Wildlife Mitigation Program for Hungry Horse and Libby Dams, Five Year Operating Plans. August 15, 1997. Montana Fish, Wildlife & Parks, Kalispell, MT. 20 pps.

APPENDIX A

**TABLE 1: ACREAGE OF INDIVIDUAL PARCELS PROPOSED FOR EXCHANGE
AND PURCHASE**

LANDS FOR EXCHANGE & PURCHASE

PARCELS FWP WANTS

	<u>ACRES</u>
Section 22, T. 27 N., R. 28 W., Loon Lake	11.22
Section 26, T. 27.N., R. 28 W., Horseshoe Lake	14.40
Section 24, T. 27 N., R. 28 W., Cibid, Cat, and Topless Lakes	92.23
Section 32, T. 27 N., R. 27 W., Upper Thompson Lake	326.76
Section 12, & 14, T. 26 N., R. 26 W., Lower Thompson Lake	39.31
Section 4, T. 26 N., R. 25 W., Little McGregor Lake	<u>86.09</u>
TOTAL	570.01

LANDS PCTC WANTS

Sections 22, 26, & 27, T. 27 N., R. 28 W., Loon Lake	200.92
Section 29, T. 27 N., R. 27 W., North U. S. Highway 2, Upper Thompson Lake	116.00
Section 4, T. 26 N., R. 27 W., North U. S Highway 2, Middle Thompson Lake	140 28
Section 9, T. 26 N., R. 27 W., South ACM Road, Middle Thompson Lake	101.19
Section 11 T.26N., R. 27 W., North U.S. Hwy. 2, South ACM Road Low. Thompson Lk.	395.78
Section 5 & 6, T. 26 N., R. 25 W., North U.S. Highway 2, McGregor Lake	273.57
Section 1, T. 26 N. R. 26 W., North U.S. Highway 2, McGregor Lake	<u>362.26</u>
TOTAL	1590.00

TABLE 1

APPENDIX B

PHOTO PAGE A	PHOTOS OF LANDS FWP WISHES TO ACQUIRE.
PHOTO PAGE B	PHOTOS OF LANDS PCTC WOULD ACQUIRE.
FIGURE 3	MAP OF SUB-DIVISION AROUND RAINBOW LAKE



North Lake Shore land on Lower Thompson Lake to be acquired by FWP.



North Lake Shore on Middle Thompson Lake to be acquired by FWP.



Wetlands and potholes NE of Upper Thompson Lake to be acquired by FWP



PCTC planned acquisition along ACM road south of Middle Thompson Lake.



PCTC planned acquisition along U.S. Hwy. 2 NW Upper Thompson Lake.



PCTC planned acquisition of high land south of Loon & Horseshoe Lakes.

APPENDIX C

Common loon biological data.

BIOLOGY AND MANAGEMENT OF THE COMMON LOON FOR THE THOMPSON CHAIN OF LAKES (TCL)

March 28, 1998

Biology/Life History

- ◆ Loons are the most primitive family of North American birds.
- ◆ 85% of Montana's approximate 65 nesting pairs nest in Region One.
- ◆ Common loons spend their first 3 years on the west coast before returning within 15 miles of the lake where they were born.
- ◆ Common loon reproduction rates are very low. Breeding begins at 5-7 years of age. Only 24-26 young are produced each year in Montana. Recruitment rate (from fledgling to a 3-year old) is less than 30% (at least 2 of every 3 birds don't return as 3-year olds).
- ◆ Because of their strong ties to traditional nesting lakes, common loons are poor pioneers of new habitat.
- ◆ The loss of successful nesting birds jeopardizes the supply of younger birds returning to the area as breeding residents; recovery of a population after extirpation (or absence of breeding birds) is slow at best.
- ◆ In sum, once common loons disappear, they are very slow in coming back. If they become listed as a federally threatened or endangered species, dramatic restrictions might be needed to insure recovery.

Thompson Chain of Lakes History

- ◆ In 1980's common loons successfully nested on at least five TCL lakes: McGregor, Lower Thompson, Upper Thompson, Horseshoe, and Loon. Historically, loons probably nested on Crystal and Middle Thompson Lakes.
- ◆ Currently, only 2 successful nesting pairs occur: one on each of the lower 2 lobes of Upper Thompson Lake.
- ◆ Due to shallow water and lack of improved boat ramps, the only boats which could be launched on the lower 2 lobes of Upper Thompson (prior to 1997)

were small boats (e.g. canoes, rafts, rowboats) or low-powered boats. Traditional uses consisted of fishing, floating, and swimming. Water skiers, fast boats, and personal watercraft were less common or non-existent.

Management Issues

- ◆ The common loon is listed as a "Species of Special Concern" by FWP; a "Sensitive Species" by USFS; as "with restricted range, vulnerable to extinction, rare and local" by the Montana Heritage Program.
- ◆ Montana's loon management plan proposes site specific management as needed to insure maintenance of existing populations. FWP does not want to see this species decline to the point of becoming endangered.
- ◆ Montana's nesting population is well below historic levels but high enough to be viable (able to sustain itself); the population appears stable in large part due to success of voluntary signs around nest sites.
- ◆ The Upper Thompson loon nests are the last in the TCL; there is a possibility they will pioneer back to other lakes in the TCL if protection of young and suitable habitat are maintained.
- ◆ The characteristics of northwest Montana's lakes are rapidly changing with increased use by recreationists and by new shoreline developments, particularly on some parcels in TCL.
- ◆ Since completion of the TCL management plan, as many as 80 new lots may be added to the Rainbow/Upper Thompson Lake area. This would comprise a 40% increase in number of residents.
- ◆ In fall 1997, FWP placed a new boat ramp on the middle lobe of Upper Thompson Lake; the TCL management plan EA identified increased boat use could impact nesting loons.
- ◆ FWP is using Wildlife Mitigation Funds as part of TCL land exchange to help secure habitat for common loons in TCL, particularly on section 32 along Upper Thompson Lakes. Use of these funds require a increased management emphasis on key wildlife areas.

FWP's Concerns at TCL

- ◆ Boat use and speeds on Upper Thompson Lake could dramatically increase due to new boat ramp and subdivision.
- ◆ The lobes of Upper Thompson are small with limited area for brood-rearing; nesting success of the only remaining pairs could easily be jeopardized with increases in boat speeds and use. Loss of nesting loons from the TCL chain would comprise a significant loss to the state's population.
- ◆ Common loons should continue to successfully nest on the lower 2 lobes of Upper Thompson lake as long as:
 1. Voluntary nest sign program continues;
 2. Boat uses/speeds do not significantly increase;
 3. Land uses remain the same.

Proposal for TCL

To mitigate for new subdivision, increasing popularity, and location of new boat ramp the middle lobe of Upper Thompson, FWP proposes:

- ◆ A no-wake limitation on the 2 lower lobes of Upper Thompson Lake. The upper lobe of Upper Thompson would not have any wake or motorized restriction.
- ◆ Monitoring of loon nesting activity on Loon Lake; propose no-wake zone around nesting and/or brood-rearing territories if deemed necessary to encourage nesting or to maintain nesting/rearing area.
- ◆ Continue to monitor loon and bald eagle use of TCL and implement education programs at campgrounds, local businesses, and communities.

Table 1: Summary of the presence and breeding activity of common loons in the Fisher-Thompson River Drainage, 1982-present.

Year	McG	LT	MT	UT	HS	Cr	Lo	Is
1981	—	—	—	—	—	—	n	—
1982	2y	P	—	—	1y	—	2y	2y
1983	1y	S	—	0	—	—	2y.S	0
1984	S	1y	—	0	2y	—	1y	1y
1985	P	0	—	1y	S	—	2y	P
1986	0	0	0	0	—	—	P.n	1y.P
1987	0	0	0	0	0	—	P	1y.P
1988	0	0	0	2y.P	0	—	1y.P.S	2y.P
1989	P	0	0	2y.P	0	0	S	2y.P
1990	0	0	S	2y.P	0	0	P.S	P
1991	—	0	0	1y.P	0	—	S	—
1992	0	—	—	2y.2P	S	0	P	P
1993	unprocessed loon day data							
1994	0	0	0	1y.P	0	0	0	1y.P
1995	0	2	0	1y.2P.n	0	0	P	1y.P.n
1996	S	0	0	3y.2P	0	0	0	P.S
1997	0	0	0	4y.2p	0	0	P.S	P.n

y = young produced.
 P = a pair of loons.
 S = a single bird.
 n = a nest observed.
 — = no observation made.
 0 = no birds were observed

McG = McGregor
 LT = Lower Thompson
 MT = Middle Thompson
 UT = Upper Thompson
 HS = Horseshoe
 Cr = Crystal
 Lo = Loon
 Is = Island

APPENDIX D

SOCIO-ECONOMIC IMPACTS

**THOMPSON CHAIN OF LAKES
LAND EXCHANGE/PURCHASE
SOCIO-ECONOMIC ASSESSMENT**

MONTANA FISH, WILDLIFE & PARKS

Prepared by:
Rob Brooks
4-14-98

I. INTRODUCTION

House Bill 526, passed by the 1987 Legislature (MCA 87-1-241 and MCA 87-1-242), authorizes the Montana Fish, Wildlife and Parks (MFWP) to acquire an interest in land for the purpose of protecting and improving wildlife habitat. These acquisitions can be through fee title, conservation easements, or leasing. In 1989, the Montana legislature passed House Bill 720 requiring that a socioeconomic assessment be completed when wildlife habitat is acquired using HB 526 monies. These assessments evaluate the significant social and economic impacts of the purchase on local governments, employment, schools, and impacts on local businesses.

This socioeconomic evaluation addresses the exchange and purchase of property presently owned by Plum Creek Timber Company. The report addresses the physical and institutional setting as well as the social and economic impacts associated with the proposed exchange and purchase.

II. PHYSICAL AND INSTITUTIONAL SETTING

A. Property Description

The property is located west of Kalispell, MT. along Highway 2 in an area known as the Thompson Chain of Lakes (TCL). The property that Plum Creek is proposing to exchange is 570 acres of lakeshore property on a number of lakes in the TCL area.

B. Habitat and Wildlife Populations

Elk, mule deer, whitetail deer, moose, mountain grouse, waterfowl as well as numerous nongame species use the TCL property either year round or seasonally. The TCL is home to the common loon, a species of special interest. A detailed account of the wildlife utilizing this area is provided in the environmental assessment on page 6.

C. Current Use

The Thompson Chain of Lakes land that is currently owned by Plum Creek was purchased by them in 1995 from Champion International. The lands adjacent to the lakes are considered high value for uses other than timber management. Plum Creek is actively looking to divest themselves of these lands.

D. Management Alternatives

- A) No purchase
- B) Exchange/purchase the property by MFWP.

Alternative B, the exchange and purchase of a these parcels will provide long term protection to the aquatic and wildlife resources the TCL area supports and provide for additional public access to this popular boating and fishing area.

The first alternative, the no purchase option, does not guarantee the protection of these resources from future development.

MFWP Exchange/Purchase Alternative

The intent of the TCL exchange is to protect and enhance the aquatic and wildlife habitat currently found on the lands. This exchange would also help maintain the open space characteristics of the area. In addition, this exchange will maintain public access to the TCL

No Purchase Alternative

This alternative requires some assumptions since management of the property will vary depending on what the current owners decide to do with the property.

Subdivision of the land for home sites is a possibility. Private lands in the area have experienced subdivision development with a subsequent loss of aquatic and wildlife habitat and public access. Plum Creek recently sold a tract of land in the Rainbow Lake area that is being developed for home sites. The environmental assessment

presents the potential impacts of these and other developments that are occurring on the lakes. The economic impacts associated with this alternative have not been calculated.

III. SOCIAL AND ECONOMIC IMPACTS

Section II identified the management alternatives this report addresses. The exchange/purchase of land provides long term protection of important aquatic and wildlife habitat, helps to preserve the open space characteristics of the area, and provides for public access. Section III quantifies the social and economic consequences of the two management alternatives following two basic accounting stances: financial and local area impacts.

Financial impacts address the cost of the exchange/purchase to MFWP and discuss the impacts on tax revenues to local government agencies including school districts.

Expenditure data associated with the use of the property provides information for analyzing the impacts these expenditures have on local businesses (i.e. income and employment).

A. Financial Impacts

The financial impacts on MFWP are related to the exchange/purchase price of the land and maintenance/management costs. The Thompson Chain of Lakes land exchange/purchase entails trading fee title 1,590 acres of forest land in the TCL area that MFWP owns for 570 acres of lake shore acreage that Plum Creek owns in the area. Due to the difference in appraised values between the forest land and the appraised value of the lake shore land, MFWP will pay Plum Creek an additional \$111,650 to make up the difference. Maintenance/management costs related to the exchange are unknown at this time.

The financial impacts to local governments are the potential changes in tax revenues resulting from the exchange of this land. Montana Code 87-1-603 specifies that MFWP pay to the county for land they own in that county “ a sum equal to the amount of taxes which would be payable on county assessment of the property were

it taxable to a private citizen”. Tax revenues associated with this exchange will not change the tax revenues Lincoln and Flathead counties receive from these lands based on their current use.

B. Economic Impacts

The exchange/purchase of these lands will not significantly affect local businesses. All the forest land has been logged in the last 25 years, some as recently as one year ago. Economic activity associated with the lands that MFWP will acquire will be minimal. Development activities will be directed at providing public access for boating and fishing activities.

IV. FINDINGS AND CONCLUSIONS

As noted at the beginning of this document, the Thompson Chain of Lakes land exchange is located in Lincoln and Flathead counties west of Kalispell, Mt.

This exchange will provide protection to aquatic and wildlife resources these lakes sustain and protect the open space characteristics of the area. In addition the exchange will maintain public access for boating and fishing on these waters.

This land exchange will not cause a reduction in tax revenues to Lincoln and Flathead counties based on current uses of the lands.

APPENDIX E

PLUM CREEK TIMBER ENVIRONMENTAL PRINCIPLES



ENVIRONMENTAL PRINCIPLES – RESOURCES

Plum Creek practices stewardship that protects and enhances the environmental values of the forests while providing for economical timber growth and harvest. Plum Creek will be responsive to public expectations for water and air quality, and for wildlife and ecological diversity. Plum Creek practices forestry on sound scientific and economic principles, and is dedicated to the future growth, productivity, diversity and health of its forests.

We conduct our forest management activities according to the following environmental principles:

- **Sustainable Forest Management** – Manage our forests in a sustainable, socially responsible, economical manner.
- **Ecological and Structural Diversity** – Enhance ecological and structural diversity where feasible and prudent by using a variety of silvicultural techniques, by retaining a diversity of vegetation and leaving trees of various sizes and species, snags, culls and other organic debris.
- **Water Quality** – Meet and where appropriate exceed, state and federal standards to protect water quality and fisheries by using Best Management Practices for all forest management activities, including the retention of buffers along streams and wetlands.
- **Air Quality** – Protect air quality by burning only when required by law for hazard abatement or when burning is an appropriate silvicultural technique to improve forest conditions or improve aesthetics in visually sensitive areas.
- **Reforestation** – Ensure future forest productivity and sustained forest growth by using the most ecologically and economically appropriate reforestation methods. Ensure that reforestation has occurred in all harvest areas — within two years in the westside forests of our Cascade Region and within five years in the Rocky Mountain Region and the east slopes of the Cascade Region.
- **Soil Conservation** – Maintain soil and site productivity by minimizing soil disturbance during harvest, and by recycling harvest residue for nutrient preservation.
- **Wildlife and Habitat Management** – Protect and enhance wildlife species and habitat areas through judicious control of road access, harvest management and cooperation with state and federal wildlife agencies.
- **Visual Quality** – Recognize and manage for aesthetic values near communities and major travel corridors by using appropriate design standards, harvest methods and tree retention.
- **Adjacent Land Management** – Cooperate with neighboring landowners in addressing and minimizing potential cumulative effects of resource management activities.
- **Research and Development** – Learn, experiment, innovate and respond to changing scientific knowledge, public concerns and economic conditions to optimize both financial and environmental performance.
- **Auditing** – Conduct regular audits to ensure that we meet or exceed the commitments made through our environmental principles.

